To: Deltoral, Miguel[deltoral.miguel@epa.gov]

From: Couillard, Lon

**Sent:** Thur 4/2/2015 8:06:09 PM

Subject: FW: Milwaukee proposed lead sampling study for Connection of Service (COS) to residents in

2015

Sampling and Flushing Recommendations 04-01-2015.docx

Miguel, our staff here at MWW discussed the items in your attached document, and we have some questions and clarifications; On page one, 5<sup>th</sup> bullet point down - most of those items are trace metals, but we wish to clarify the P and Cl -- do you mean Phosphorus and Chloride? Or something else?

We do not currently have the ability to analyse for Cadmium and Calcium by AA Spectrophotometry - how critical are they?

Your list in the 5<sup>th</sup> bullet point down would require both furnace and flame AA Spectrophotometry methods – we could simplify the analysis workload greatly by just doing furnace-method metals – is that acceptable to you for this study?

Regarding bullet point # 6 - MWW recently completed work for WRF Project # 4569 -- Effect of Sequential Sampling Techniques for Lead & Copper Monitoring. We commonly refer to this as the EE & T study.

Although our MWW sample size was small (six) sites, we found that a 12-Liter sequential sampling protocol, based on calculated volume, extended out past the water main/LSL connection in all cases.

We therefore believe that a 12-Liter sample protocol is sufficient – what do you think?

From: Deltoral, Miguel [mailto:deltoral.miguel@epa.gov]

Sent: Wednesday, April 01, 2015 3:21 PM

To: Couillard, Lon

Cc: Elmore, Steve B - DNR; Constantine.tsoris@wisconsin.gov; Nelson, Mark A - DNR; Porter,

Andrea; Poy, Thomas; Joe Janczy

Subject: Re: Milwaukee proposed lead sampling study for Connection of Service (COS) to

residents in 2015

Sorry, I forgot the other attachment.

Miguel A. Del Toral

Regulations Manager U.S. EPA R5 GWDWB 77 West Jackson Blvd, (WG-15J) Chicago, IL 60604 Phone: (312) 886-5253

From: Deltoral, Miguel

Sent: Wednesday, April 1, 2015 03:15 PM

To: Couillard, Lon

Cc: Elmore, Steve B - DNR; Constantine.tsoris@wisconsin.gov; Nelson, Mark A - DNR; Porter,

Andrea; Poy, Thomas; Joe Janczy

Subject: Re: Milwaukee proposed lead sampling study for Connection of Service (COS) to

residents in 2015

Hi Lon,

Attached are my thoughts and recommendations. They are consistent with what you are thinking, except that I would recommend 15 sequential samples because the lines are being disturbed at the far end near the main so you want to make sure the sampling catches that. Please feel free to call anytime if you have any questions.

Miguel A. Del Toral

Regulations Manager U.S. EPA R5 GWDWB 77 West Jackson Blvd, (WG-15J) Chicago, IL 60604 Phone: (312) 886-5253

From: Couillard, Lon < Lon.A.Couillard@milwaukee.gov>

Sent: Tuesday, March 31, 2015 03:09 PM

To: Deltoral, Miguel

Subject: Milwaukee proposed lead sampling study for Connection of Service (COS) to residents

in 2015

Miguel, I understand you have been in recent contact with Abigail RE: her AWWARF project, and you are aware that Milw Water Works is a participant in that.

In addition, MWW is planning to conduct a lead sampling study for Connection of Service (COS) to residents in 2015 during our main replacement/relay projects, for those homes with identified lead service lines. The COS procedure is described as a snipping of the LSL at the existing coupling or corporation, then re-connection of the LSL to the new main using a brass/copper flange and clamp.

MWW proposes to recruit a pool of volunteers from homes in each main-relay project area, and have them collect three sets of samples to be analyzed for lead & copper; 1)pre-construction, 2)within 72 hours of re-connection, and 3) after approx. 30 days post-completion. Each set of samples would be a set of 12 sequential 1L samples, collected with aerators on, after the minimum 6 hours stagnant period.

We are asking for your input and approval to proceed with this project. In addition, we look for feedback as to whether homeowners should be encouraged to flush their home plumbing after re-connection, but before the 72-hr sampling, with the aerators off.

Your thoughts on this are appreciated.

Lon A. Couillard

Water Quality Manager

Milwaukee Water Works

414-286-2226

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